

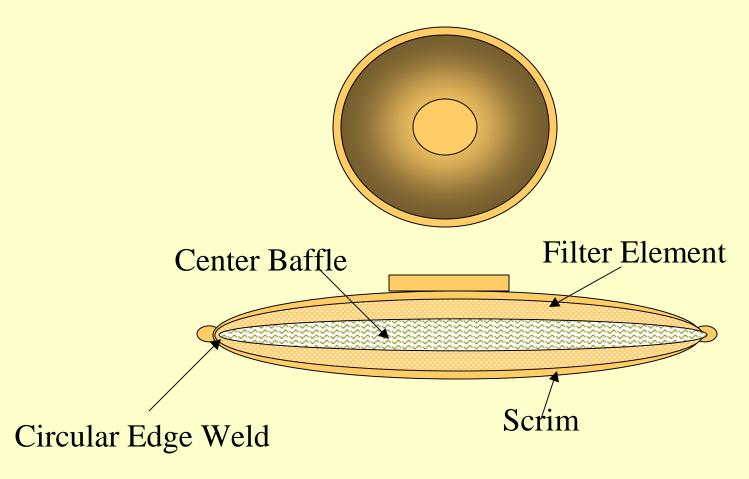
## Improved HEPA Filter for Flexible and Rigid Containment Barriers

Paul Pinson

Idaho National Engineering and Environmental Laboratory (INEEL)

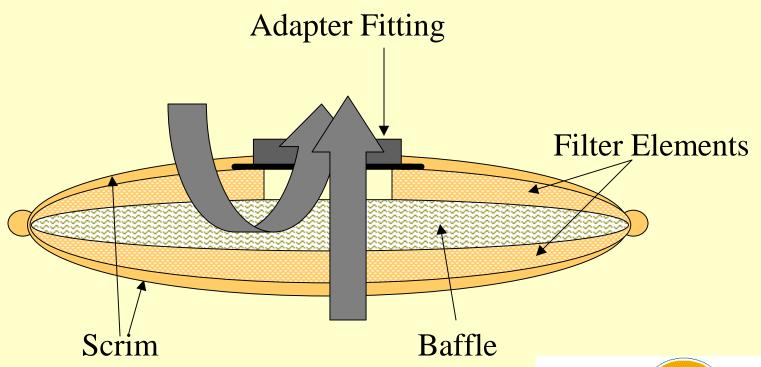


# Improved HEPA Filter for Flexible and Rigid Containment Barriers

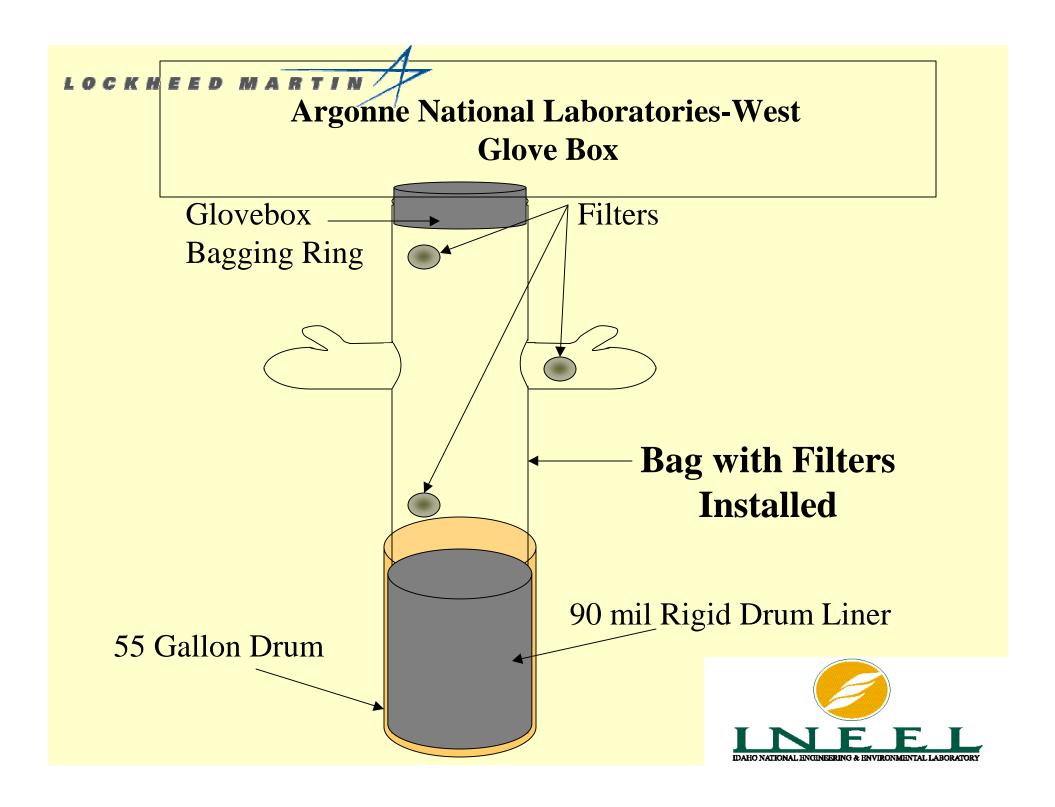




#### AIR FLOW THROUGH TYPICAL CIRCULAR FLEXIBLE BREATHING AIR MASK FILTER

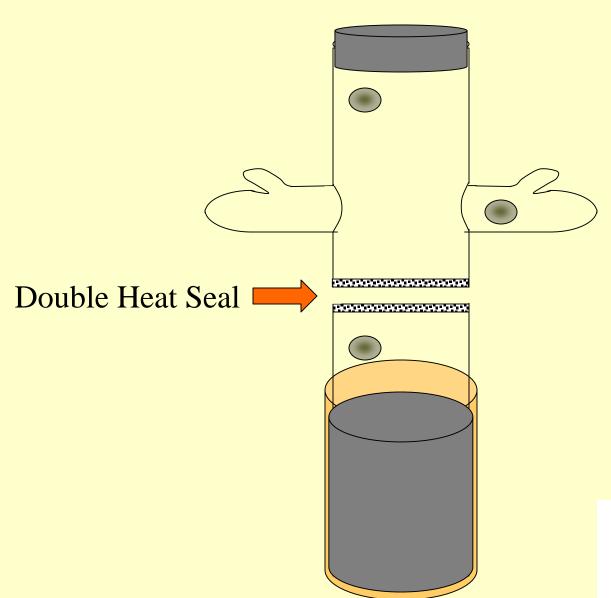








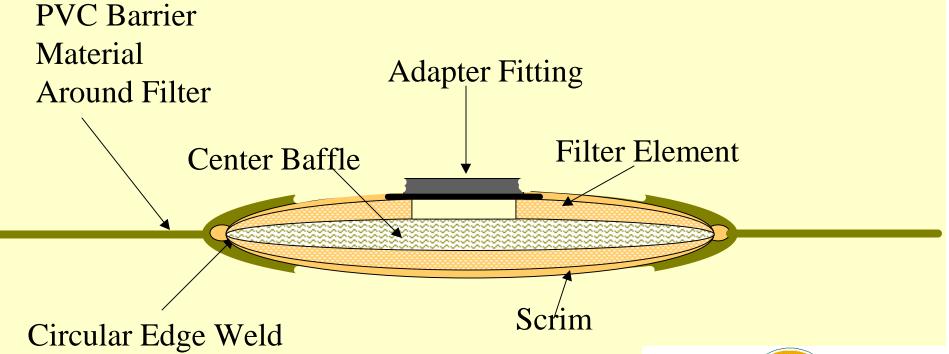
#### **Argonne National Laboratories- West Bag with Filters Installed**







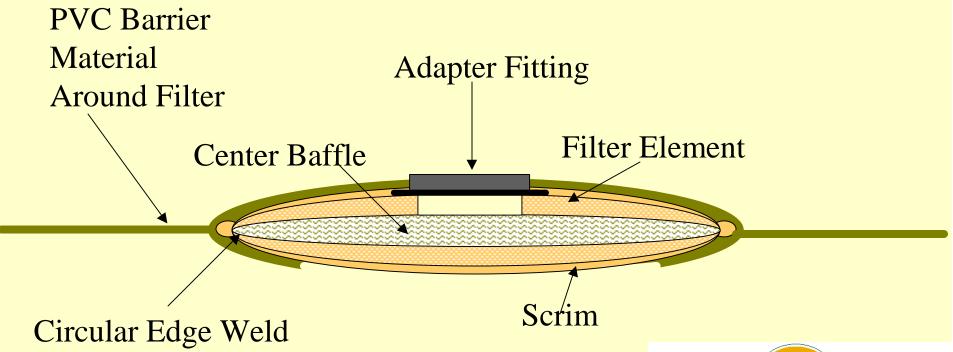
### CONTINUOUS VENTING PVC POCKET AROUND FILTER







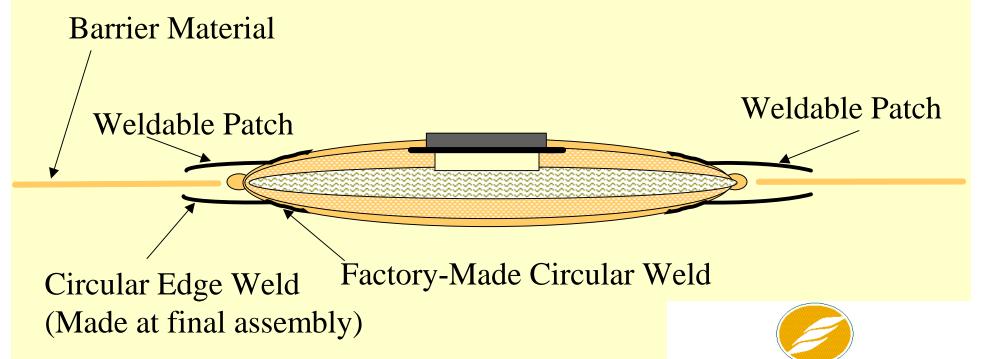
#### AIRTIGHT SEALABLE PVC POCKET AROUND FILTER





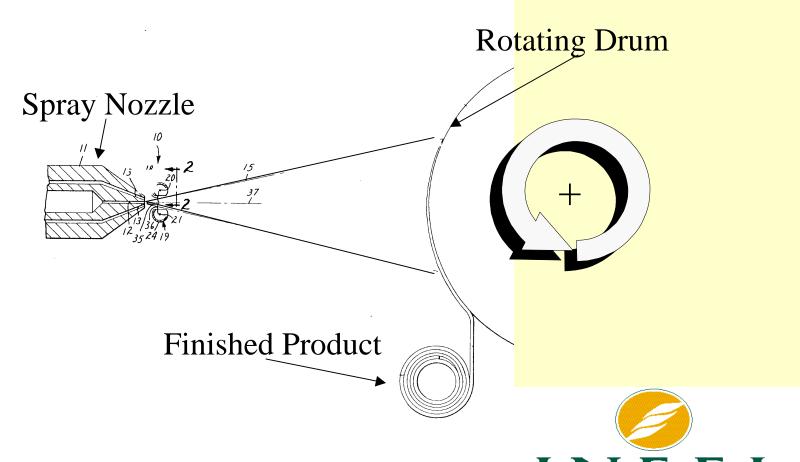


#### CIRCULAR PATCH FILTER WELDABLE TO BARRIER MATERIAL



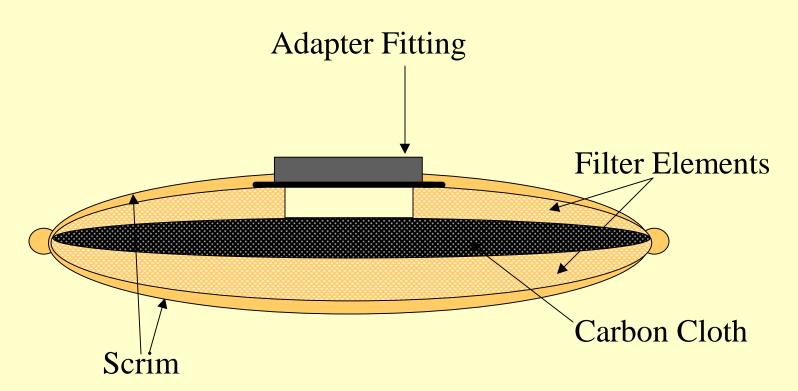


# Blown Microfiber (BMF) Polypropylene Manufacturing





#### Mist and Vapor Filtering







# Current Plastic Welding Capabilities Welding Filters to Barriers

Filters Barriers

Polypropylene

Weldable

Polypropylene Polyethylene

Polypropylene

Non-Weldable

Polyvinyl Chloride Polyurethane

